

# KANSAS WATER VISION IMPLEMENTATION – A REGIONAL APPROACH

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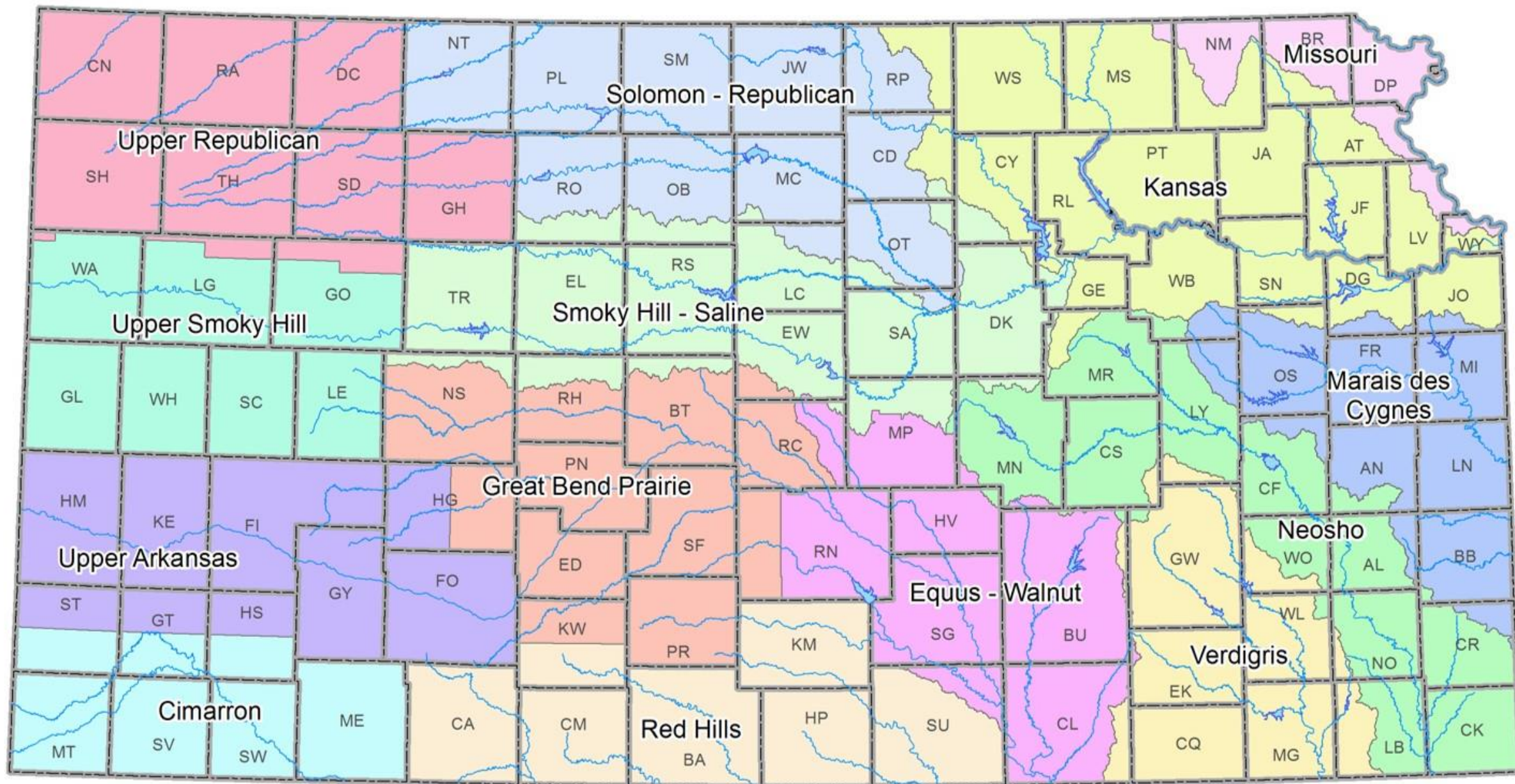


State Conservation Commission Area Spring Workshops

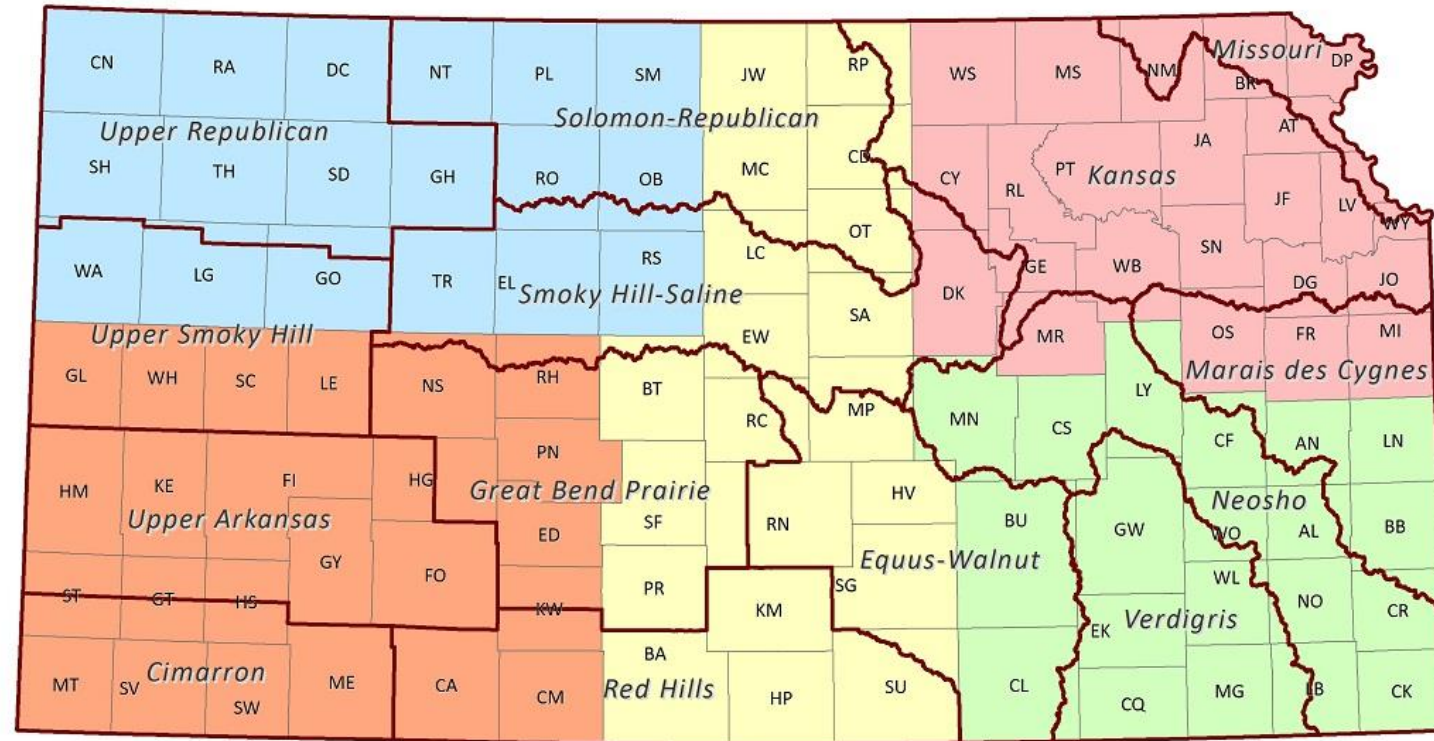
March 16, 2017

# REGIONAL ADVISORY COMMITTEES

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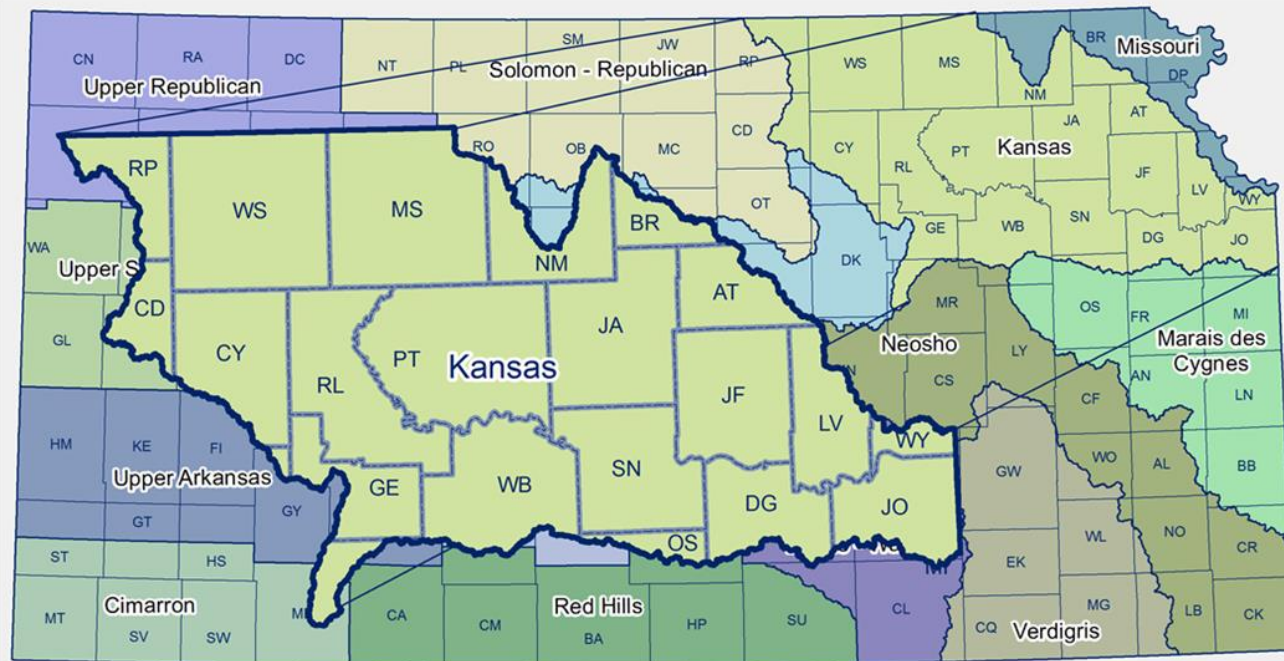




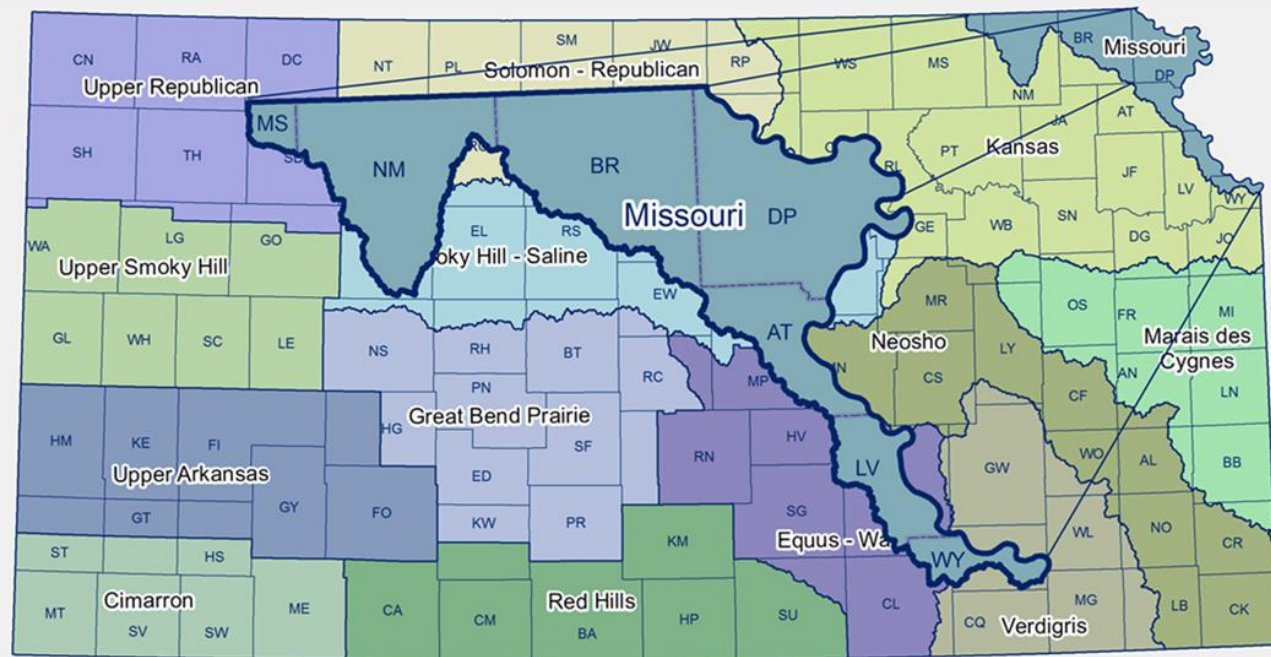


Kansas Conservation District Areas



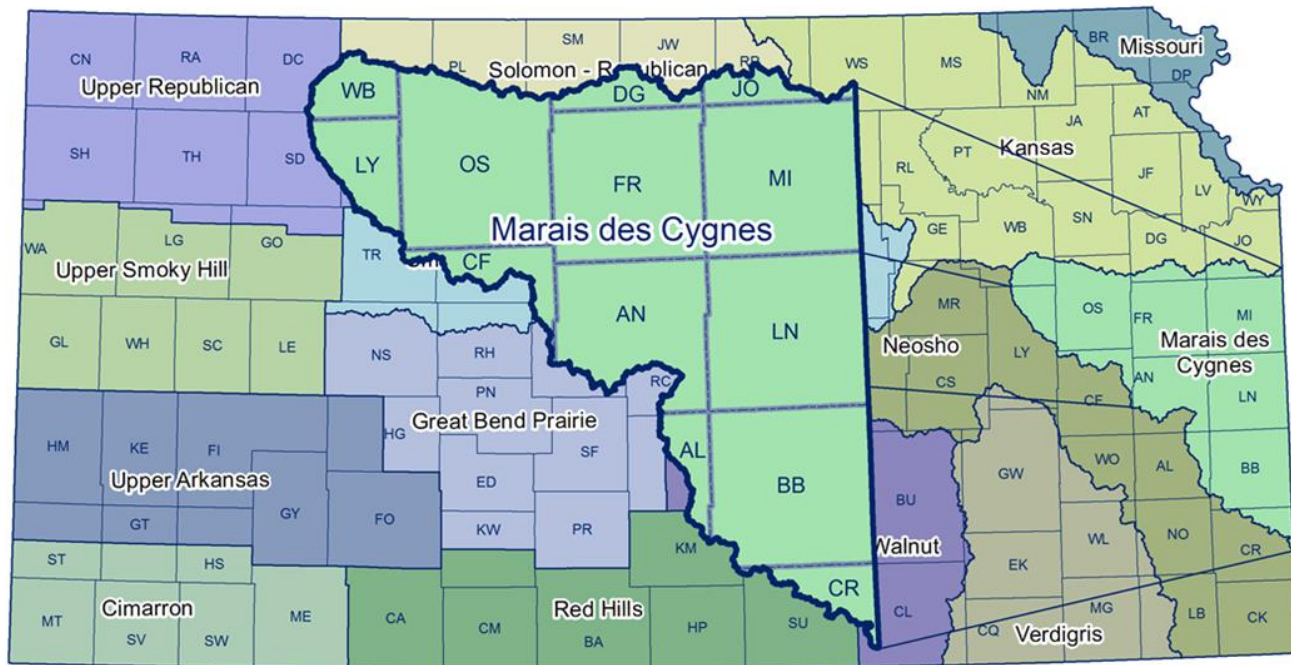


Membership			
Name	City	Category	Term
Sarah Hill-Nelson (Chair)	Lawrence, KS	Industry/Commerce 2	2019
Marlene Bosworth	Sabetha, KS	Conservation/Environment (cc)	2019
Brad (William) Bradley	Overland Park, KS	Fish & Wildlife	2017
Glenn Brunkow	Pottawatomie County, KS	Agriculture (cc)	2017
Dawn Buehler	Eudora, KS	Recreation	2019
Blake Follis	Topeka, KS	At Large Public (cc)	2019
Heath Horyna	Topeka, KS	Industry/Commerce (cc)	2017
Daniel Howell	Frankfort, KS	Agriculture 2	2017
Darci Meese	Lenexa, KS	Public Water Supply (cc)	2019
Katie Miller	Junction City, KS	Conservation/Environment 2	2019
William Ramsey	Leawood, KS	Planning, Restoration & Protection	2017
Sharon Schwartz	Washington, KS	WRAPS	2019
Greg Wilson	Olathe, KS	Water Assurance District	2017

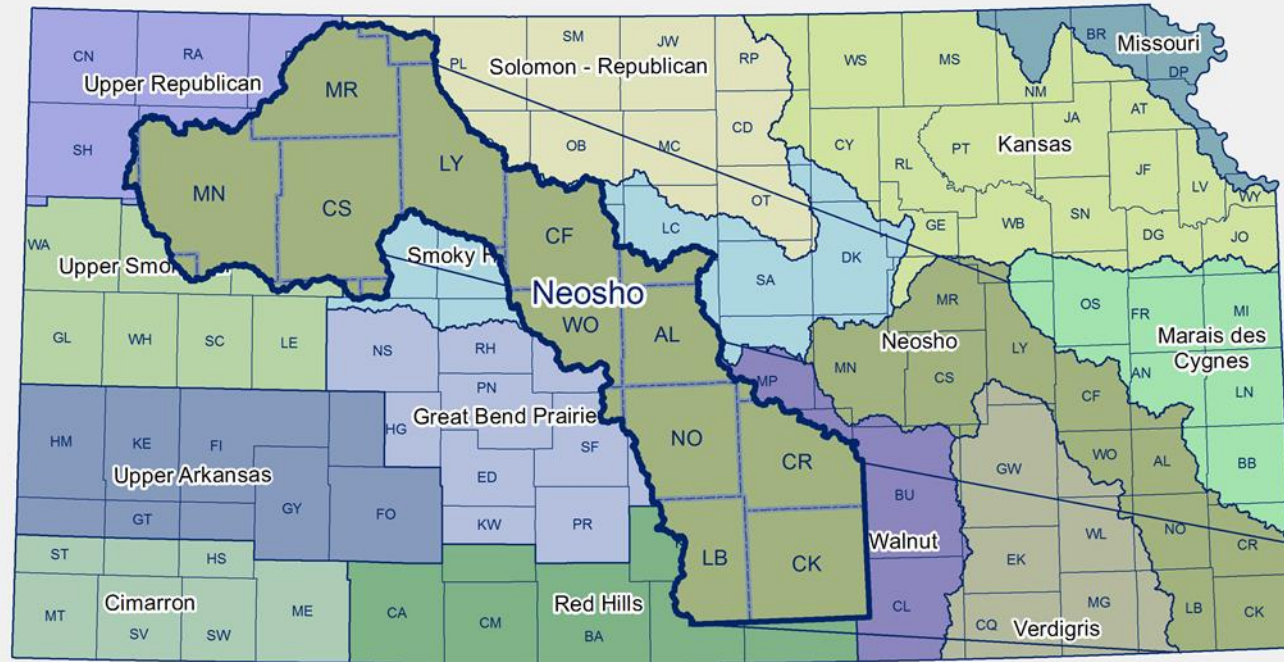


Membership			
Name	City	Category	Term
Carl Johnson (Chair)	Leavenworth, KS	Conservation/Environment (cc)	2019
John Bishop	Atchison, KS	Recreation	2019
Neil Coufal	Troy, KS	At Large Public (cc)	2017
Stephen Glaser	Atchison, KS	Industry/Commerce (cc)	2019
Jeffrey Grossenbacher	Bern, KS	Agriculture (cc)	2019
Carol Hughes	Seneca, KS	WRAPS	2017
Alan Kelley	White Cloud, KS	Iowa Tribe of KS & NE	2019
Joel Mahnken	Leavenworth, KS	Public Water Supply (cc)	2017
Brett Neibling	Highland, KS	Agriculture 2	2019
Darcy Nightingale	Hiawatha, KS	Agriculture Industry	2017
Bill Shroyer	Sabetha, KS	Public Water Supply 2	2019
Luke Terry	Robinson, KS	Fish & Wildlife	2017
Michelle Wirth	Kansas City, KS	Public Water Supply 3	2017



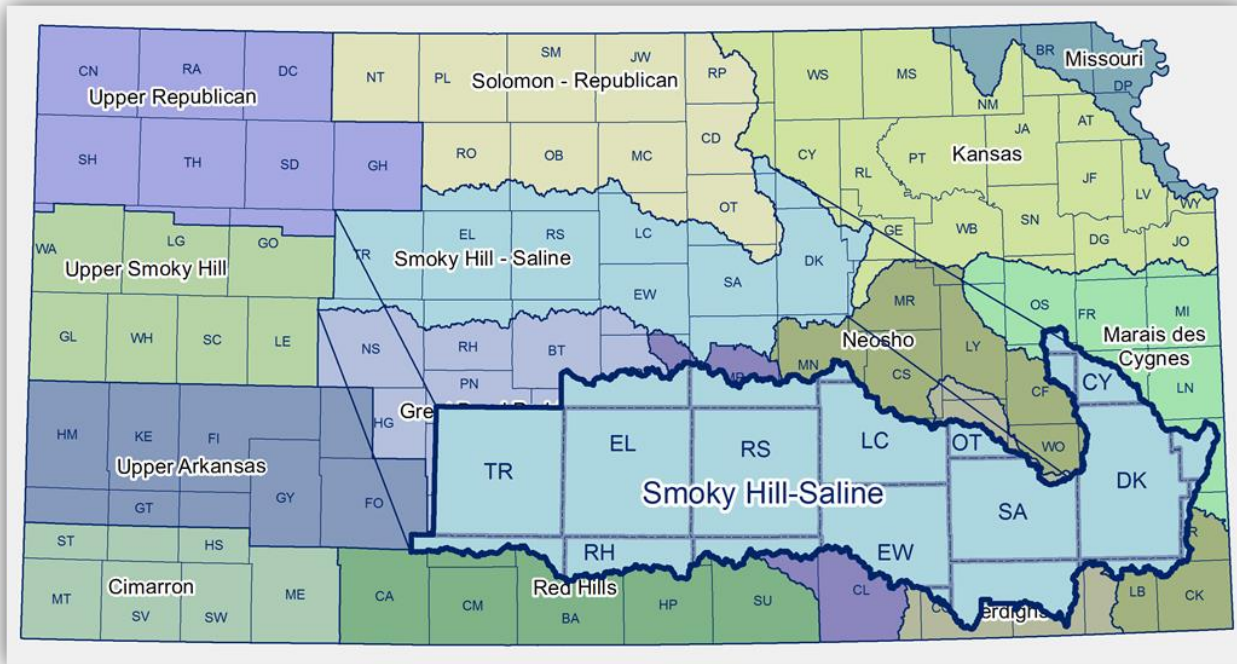


Membership			
Name	City	Category	Term
Lori Kuykendall (Chair)	Lyndon, KS	WRAPS	2019
Wes Sherman Cole	Osawatomie, KS	Industry/Commerce (cc)	2019
Ron Brown	Fort Scott, KS	Conservation/Environment (cc)	2017
Mike Gilliland	Osage City, KS	At Large Public (cc)	2019
Vacant		Agriculture 2	2017
Keri Harris	Ottawa, KS	At Large Public 2	2017
Paul Ling	Kansas City, KS	Water Assurance District	2019
Richard Nienstedt	Ottawa, KS	Public Water Supply 2	2019
George Pretz	Paola, KS	Agriculture (cc)	2017
Allan Soetaert	Gardner, KS	Public Water Supply (cc)	2019
Larry Walrod	La Cygne, KS	Planning & Zoning	2017
Lyle Wobker	Paola, KS	Agriculture 3	2019
Scott Yeargain	Ottawa, KS	Conservation/Environment 2	2017



Membership			
Name	City	Category	Term
Angela Anderson (Chair)	Allen, KS	WRAPs	2019
Joe Buchanan	Council Grove, KS	Public Water Supply (cc)	2017
Jay Byers	Pittsburg, KS	At Large Public (cc)	2017
Phillip Cooper	Emporia, KS	Water Assurance District	2019
Wes Fleming	Burlington, KS	Industry/Commerce (cc)	2019
John Hough	Cherokee, KS	Industry/Commerce 2	2017
Gary Kilgore	Chanute, KS	Agriculture (cc)	2019
Brian Obermeyer	Cottonwood Falls, KS	Conservation/Environment 2	2019
Larry Paine	Hillsboro, KS	At Large Public 2	2019
Galen (Pete) Peterson	Burdick, KS	Ranching/Grazing	2019
Nik Roth	Emporia, KS	Agriculture Industry	2017
Pat Sauble	Cedar Point, KS	Agriculture 2	2017
James Triplett	Pittsburg, KS	Conservation/Environment (cc)	2017





Membership			
Name	City	Category	Term
Martha Tasker (Chair)	Salina, KS	Public Water Supply (cc)	2019
Greg Barrett	Marquette, KS	Agriculture 2	2017
Sandra Beisner	Ellis, KS	Industry/Commerce (cc)	2019
Toby Dougherty	Hays, KS	Large Public Water Supply	2019
Paul Froelich	Enterprise, KS	At Large Public 2	2017
Chris Meyer	Sylvan Grove, KS	Agriculture (cc)	2019
John Peckham	Salina, KS	Conservation/Environment 2	2019
Allen Roth	Hays, KS	Conservation/Environment (cc)	2017
Bevin Law	Longford, KS	Conservation	2017
Timothy Scheck	Russell, KS	Industry/Commerce 2	2017
Alan Scheuerman	Ellis, KS	Small Public Water Supply	2019
Brad Shogren	Lindsborg, KS	Irrigation	2017

# KWA Approves RAC Action Plans

- Nearly 60 action plans developed by RACs in 2016
- 10 of 14 regions have watershed-based goals and action plans



# BLUE RIBBON FUNDING TASK FORCE

Vision for the Future of Water Supply in Kansas

Supply

WATER

Conservation

Research

VISION

Action

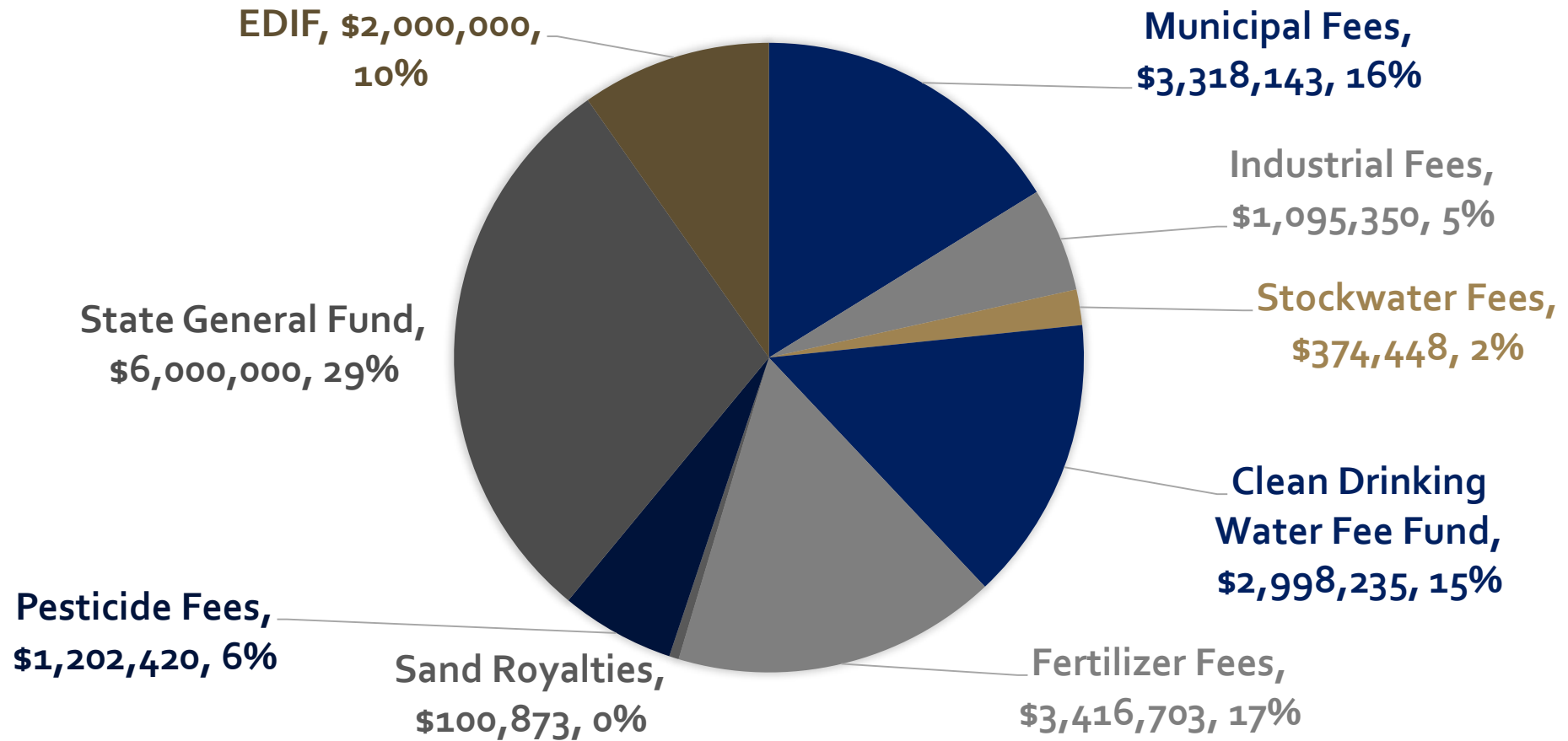
Future

Technology

LOCAL



# Review of existing funding and sources



# Estimation of annual funding requirement to implement the Vision ~ \$55M

	Water Conservation	Water Management	Technology and Crop Varieties	Additional Sources of Water
Research		\$300,000	\$4,500,000	\$500,000
Education and Outreach	\$4,250,000		\$5,000,000	
Actions and Practices	\$21,900,000	\$100,000	\$1,500,000	\$17,500,000
Administration	Should agency administration be paid from implementation funds?			
<b>Total</b>	\$26,150,000	\$400,000	\$11,000,000	\$19,000,000

\* Does not include estimated annual funding needs from Regional Advisory Committee Action Plans

# Evaluation of various funding sources

- Increase existing State Water Plan Fund fees
- Water right fee/Irrigation fee
- Bottled drinking water fee
- Residential electric fee
- Statewide retail sales tax



# CURRENT IMPLEMENTATION ACTIONS

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# Vision Implementation – New BMP \$

## Key Concepts

- New funding not utilized to restore prior SWP reductions
- Projects “come towards the money”
- Kansas Basin Watershed Management System (KBWM) to serve as framework for allocation of new \$
- KWO will serve as the initial repository for new BMP funds

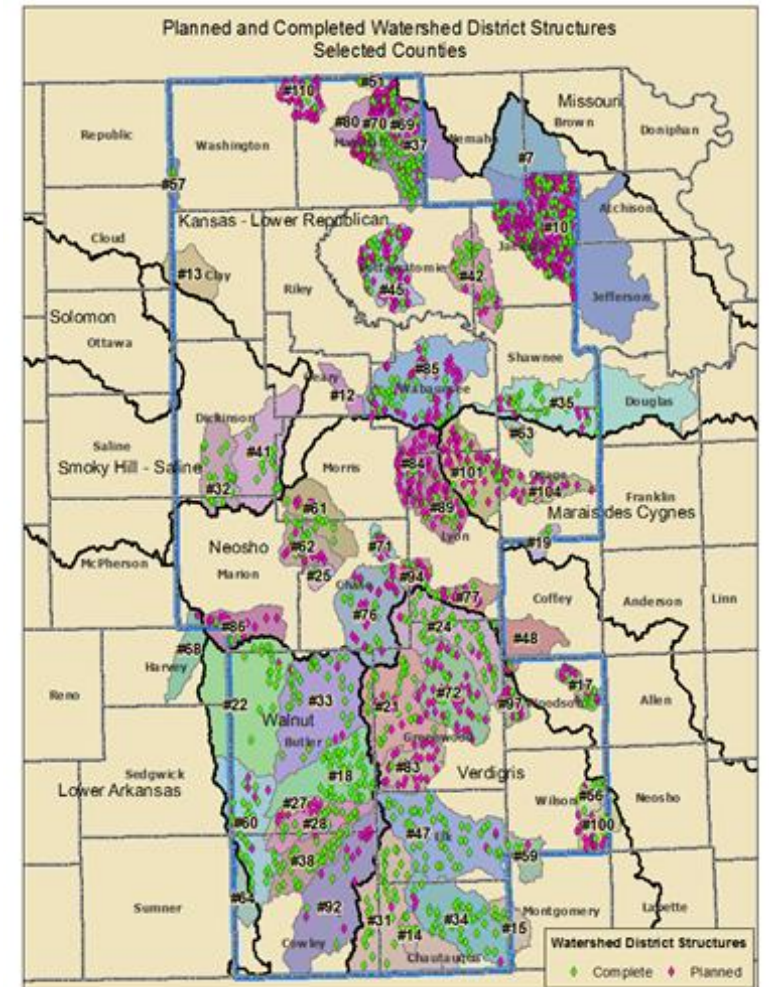
## Key Concepts

- Increased technical assistance to facilitate BMP implementation is critical
- Additional on-the-ground coordination needs determined by KDHE
- Effective contract management system needed for administration of individual funded projects



# KWA Project Sheet – Watershed Dams

- Update inventory of watershed dams
- Identify districts/sites that are strategically located above water supply reservoirs
- Conduct feasibility study of watershed dam construction
- Rehabilitate completed projects as needed
- \$1 - \$2 million estimated annual need





# WATER TECHNOLOGY FARMS

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# Water Technology Farms



- Three Water Technology Farms established for 2016 growing season.
- KSU providing technical assistance at all three.
- Up to 7 additional farms to be added for 2017

**FIELD DAY** August 2, 2016  
10 a.m.

*Water Technology Farm* — T&O Farms, LLC

South of Garden City on Hwy 83 (15.5 miles) • Turn west on T.V. Rd • Turn south on Stone Rd • Location on east side at large outbuilding (see back)

RSVP to the Kansas Water Office by July 26  
1-888-KAN-WATER  
kwo-info@kwo.ks.gov

**AGENDA**

**Welcome**  
Tom Willis

**Comments**  
Governor Brownback

**Role of Water Technology Farms**  
Tracy Streeter

**Introduce Partners**  
**Technical Briefings**  
KSRE, Jonathan Aguilar  
Seaman Crop Consulting, Loren Seaman  
Dragon-Line, Monty Teeter

**Tour of Farm**  
**Lunch Provided**  
by Conestoga Energy Partners

**SPONSORS**

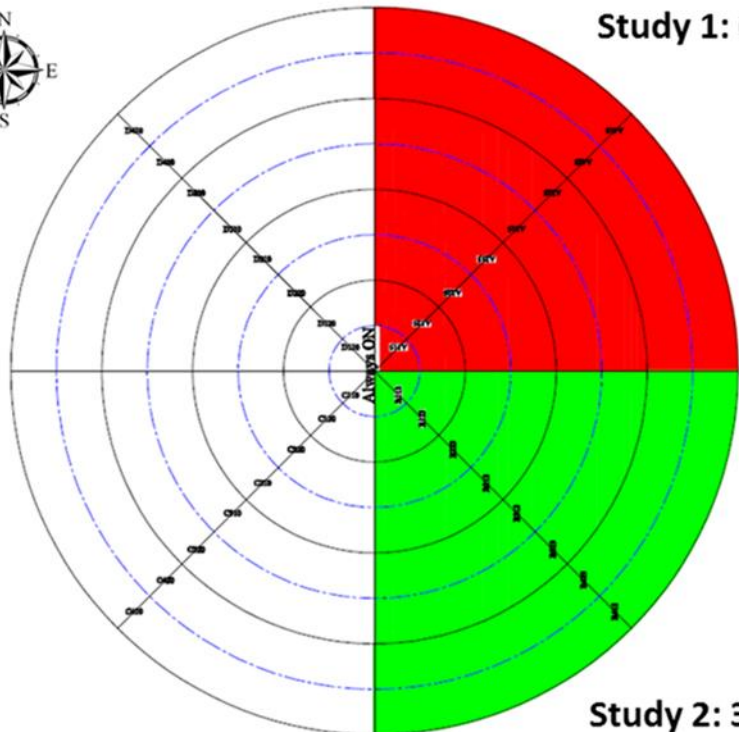
T&O Farms, LLC (Tom Willis)  
Kansas Water Office  
Kansas Department of Agriculture  
United Sorghum Check-off Program  
Kansas Corn Commission  
Seaman Crop Consulting  
SW Groundwater Management District #3  
Conestoga Energy Partners  
Teeter Irrigation  
Dragon-Line  
Helena  
Kansas Geological Survey  
Ogallala Aquifer Program  
Syngenta  
Hortau  
Servi-Tech Expanded Premium Services  
Kansas Farm Bureau  
K-State- Mesonet  
AquaSpy  
CropMetrics  
Netatim  
Valley Irrigation  
Presley Solutions

*A public-private project for the conservation of the Ogallala aquifer implemented as part of the Kansas Water Vision*

Showcase on a field scale, the latest technologies in irrigation infrastructure, irrigation water management, soil moisture management, conservation tillage, automation telemetry and other agronomic practices aimed at reducing water use.



Study 1: 600 gpm



Study 2: 300 gpm



# MDI Evaluation - KSU

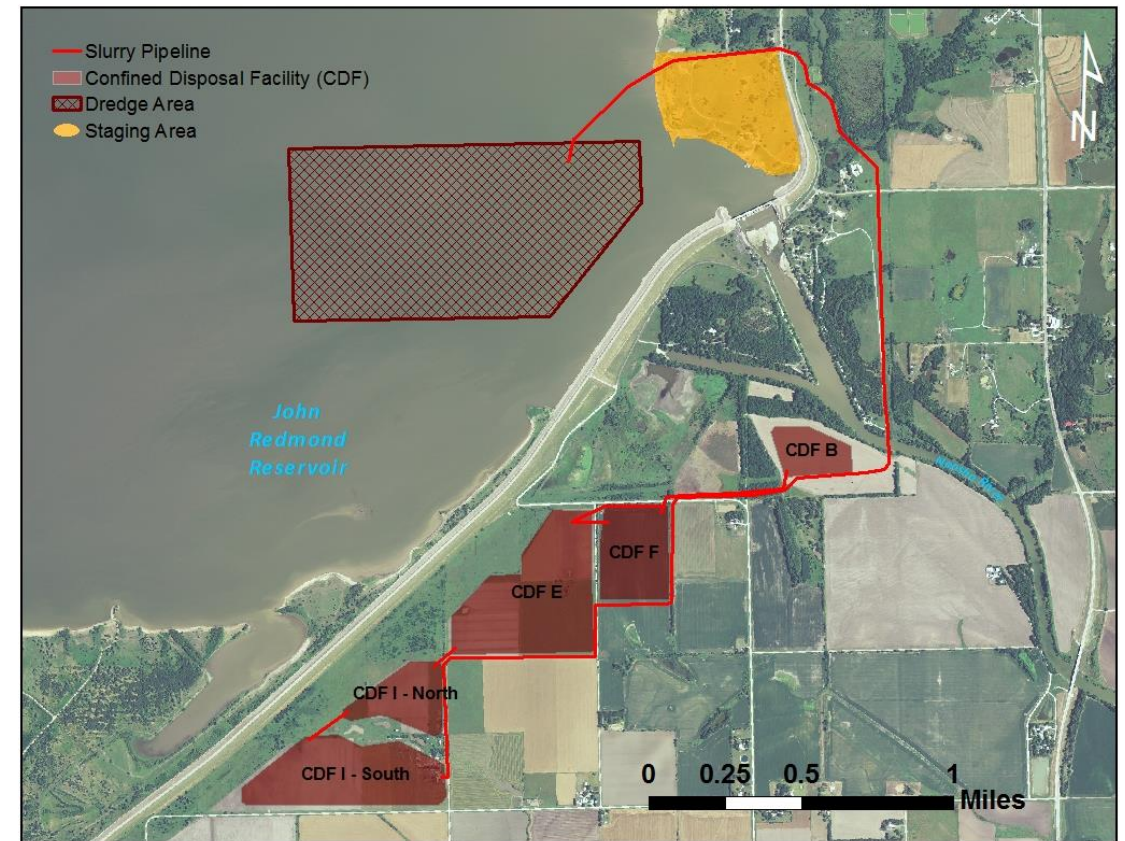
- **2015 results comparing MDI to spray nozzles**
  - 30% reduction in evaporation
  - 14" applied @ 600 gpm - 8" @ 300 gpm
  - 247 bu/ac @ 600 gpm – 243 bu/ac @ 300 gpm
  - 10% increase in yield with MDI on the 300 gpm well
  - Water evenly distributed in soil profile
  - Dry soil surface
  - Minimal wheel tracks

# RESERVOIR ACTIVITIES



# John Redmond Reservoir Dredging

- Backup supply to state's only nuclear power plant
- 1<sup>st</sup> water supply dredging project at a USACE reservoir in the US
- Phase I completed ahead of schedule



# John Redmond Reservoir Dredging



3,000,000 million cubic yards of deposited sediment removed



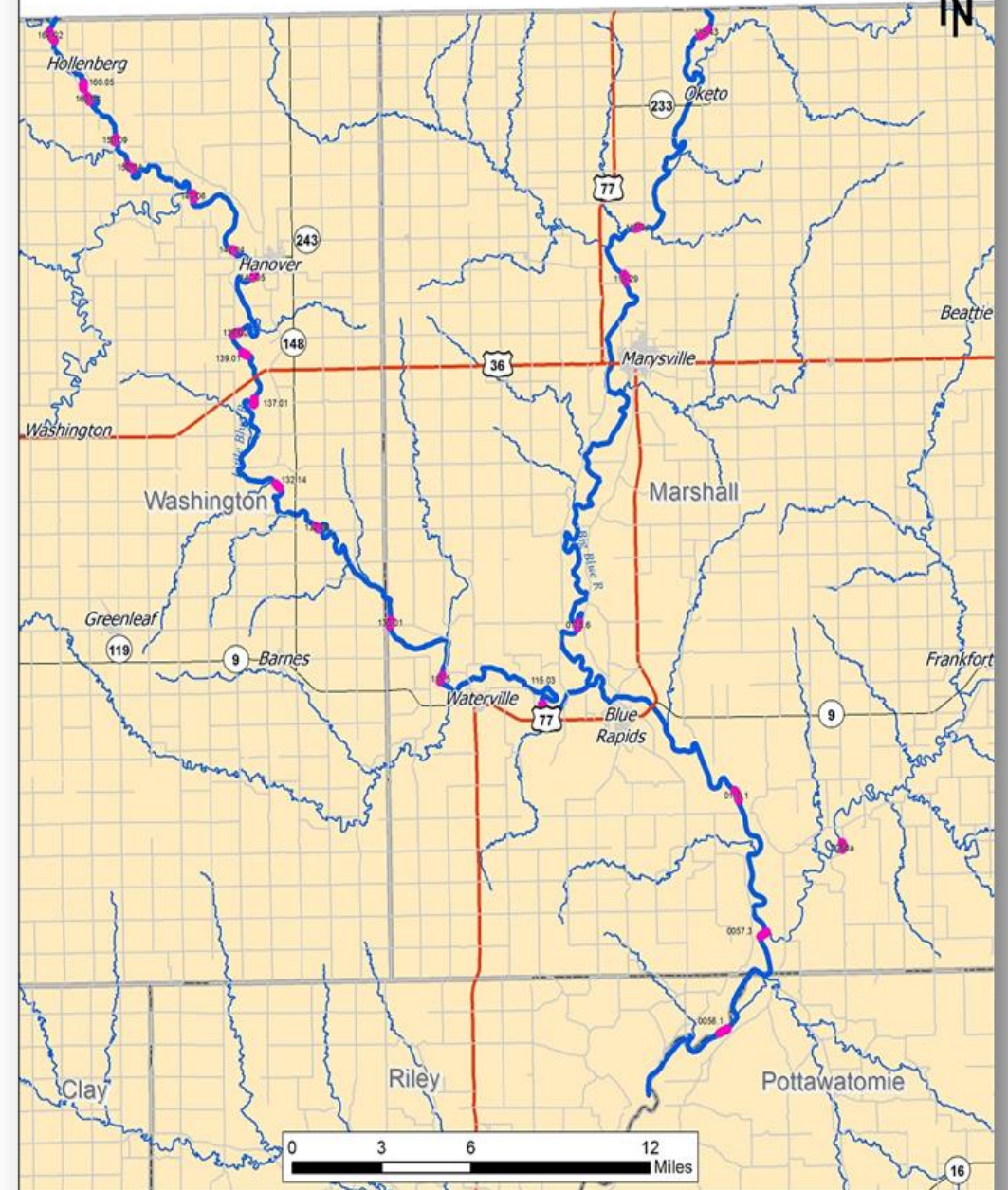
More than 1,800 acre-feet of storage restored

Restore and dispose up to three million cubic yards of sediment from John Redmond Reservoir.



# Tuttle Creek Sediment Reduction

- Tuttle Creek WRAPS, KWO, KDHE and KDA-DOC coordinating and pooling funds to complete projects
- \$800,000 allocated for FY16 and FY17
- FY16 funding will be used to pay for the design of several projects above Tuttle Creek
- Construction will occur over the next couple of years



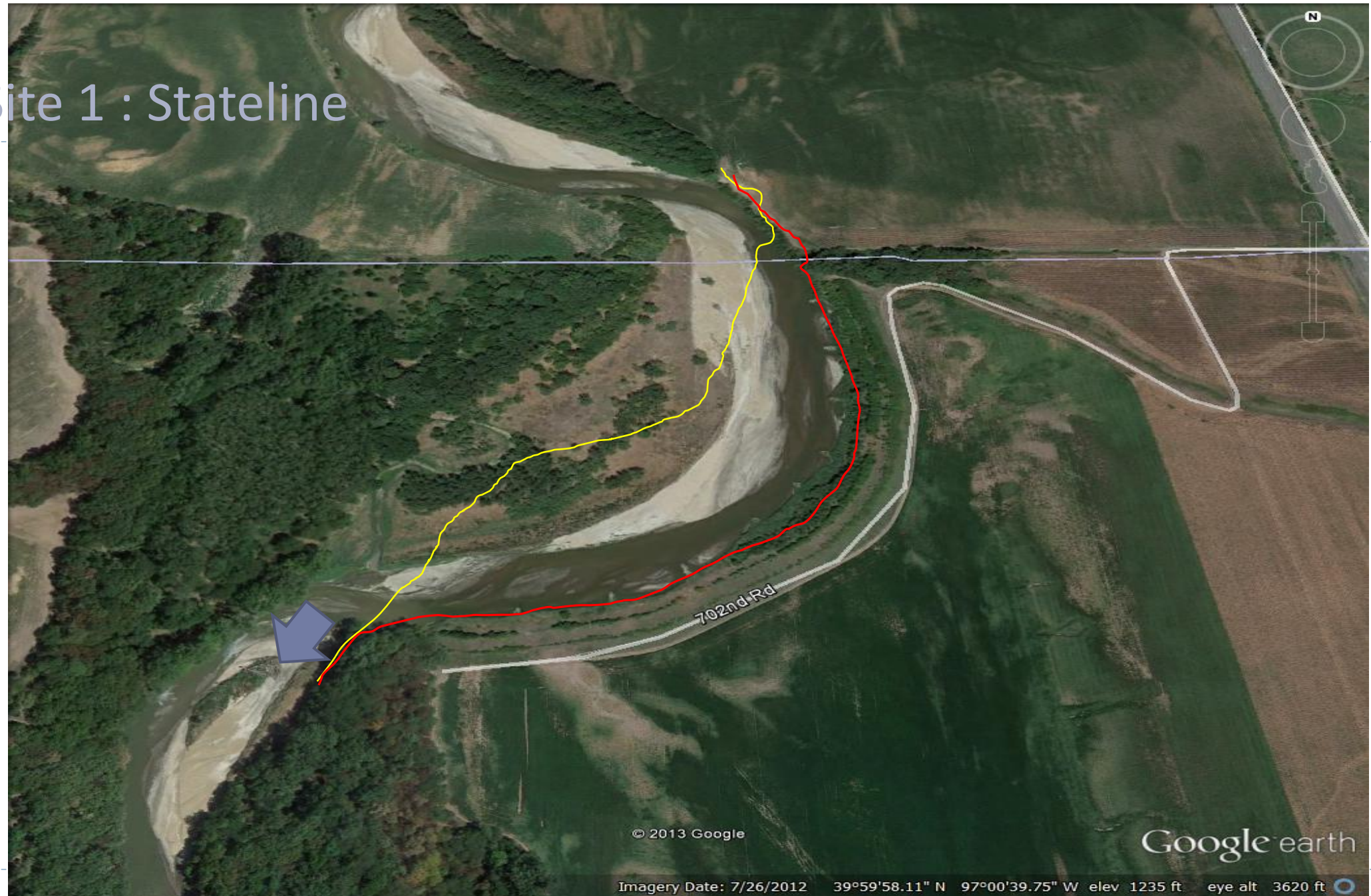
Top Eroding Streambanks: 76 - 100

# Before & After





## Site 1 : Stateline





# Nutrients and Harmful Blue-Green Algae

## Milford, Marion Reservoirs & others.....

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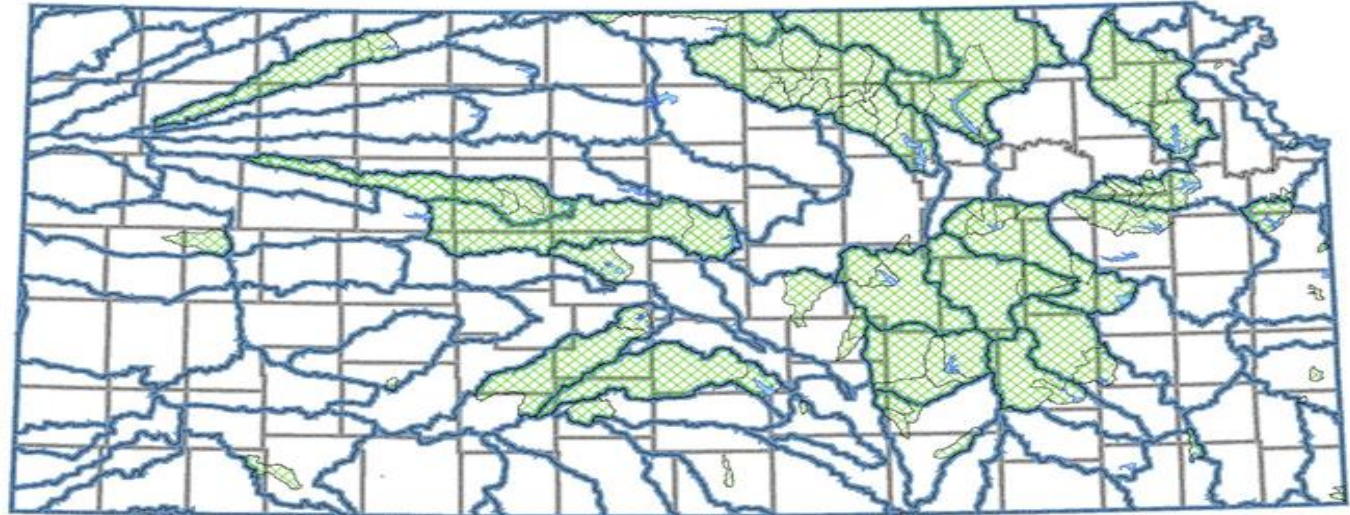


# EQIP

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- ▶ Ranking criteria for Water Quality funding modified
  - ▶ Maximum points to projects addressing Siltation, Phosphorus and Eutrophication

TMDL Priority Areas  
Siltation, Total Phosphorus, and Eutrophication  
With KDHE - TMDL Section Built Out Watersheds





# QUESTIONS & DISCUSSION

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Topeka, KS 66612  
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[tracy.streeter@kwo.ks.gov](mailto:tracy.streeter@kwo.ks.gov)

